

Office of Public Instruction

P.O. Box 202501 Helena, MT, 59620-2501 (406) 444-3095 (888) 231-9393 (406) 444-0169 (TTY) opi.mt.gov

Montana	Common Core Shifts in Mathematics
Shift 1: Focus	Teachers make purposeful instruction and assessment decisions based on the critical areas of focus which significantly narrow and deepen the scope of how time and energy is spent in the math classroom. They do so in order to focus deeply on only the concepts that are prioritized in the standards so students reach strong foundational knowledge and deep conceptual understanding and are able to transfer mathematical skills and understanding across concepts and grades.
Shift 2: Coherence	Principals and teachers carefully connect the learning within and across grades, for example, fractions or multiplication progresses across grade levels and students can build new understanding onto foundations built in previous years. Teachers can begin to count on deep conceptual understanding of core content and advance learning. Each standard is not a new event, but an extension of previous learning.
Shift 3: College and Career Readiness	Students are expected to graduate from high school able to succeed in entry-level, credit-bearing, academic college courses and in workforce training programs. The standards were written to be aligned with college and work expectations, including rigorous content and application of knowledge through high-order skills, and were informed by other top performing countries, so that all students are prepared to succeed in our global economy and society.
Shift 4: Mathematical Practices	Teachers teach more than "how to get the answer" and instead support students' ability to access concepts from a number of perspectives so that students are able to see math as more than a set of mnemonics or discrete procedures. The Standards for Mathematical Practice describe the variety of expertise that mathematics educators at all levels should seek to develop in their students, and that should be emphasized in concert with context and content grade-level standards. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education.
Shift 5: Application	Students are expected to use math and choose the appropriate concept for application even when they are not prompted to do so. Teachers provide opportunities at all grade levels for students to apply math concepts to everyday life, work, and decision-making situations. Teachers in content areas outside of math, particularly science, ensure that students are using math – at all grade levels – to make meaning of and access content. The increased emphasis on the process of modeling links classroom mathematics and statistics to contextual situations.
Shift 6: Balanced Emphasis	Students are practicing and understanding. There is more than a balance between conceptual and procedural knowledge in the classroom – both are occurring with intensity. Teachers create opportunities for students to participate in "drills" and make use of those skills through extended application of math concepts. The amount of time and energy spent practicing and understanding learning environments is driven by the specific mathematical concept and therefore, varies throughout the given school year.

This document was adapted from Common Core "Shifts" originally published by engageny.

